THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. XL. WEDNESDAY, MARCH 7, 1849. No. 5.

A DISSERTATION ON FEVER.

Delivered before the Medical Society of Vermont, October, 1848, by the President, JAMES SPALDING, M.D., and published by request of the Society.

WRITERS upon the diseases of particular climates very naturally treat the subjects on which they write in a general way or manner, without descending to particulars or minutiæ. By confining themselves to what is common, they give us a good idea of diseases in general; in this way they furnish us with our elementary or standard works, by which we compare and judge of diseases in their peculiar and modified forms.

The ordinary limits of a single dissertation will not allow me to enter very minutely into so vast a subject as that of fever. A notice of some of the most prominent traits in the pathology of *typhus fever*, in reference to its *causes* and *treatment*, is all that will be attempted at the present time.

The typhus fever, as it has occurred in my practice, has never been uniform in its character. It has never presented itself to my observation as being exactly the same in any two seasons. It has ever appeared to me to partake of an epidemic influence. Its type is various. In some years it is quite inflammatory, and again it is of low type. Sometimes it resembles a bilious remittent, and again it mingles with scarlatina, dysentery, and other diseases. I do not deny that this fever may arise from certain specific causes, and be of such uniform character as to require the same treatment; still I am constrained to say that it has seldom, if ever, presented itself in my practice in this shape or manner. On the contrary, it has been so much influenced by circumstances and causes, as to render it sporadic, endemic, epidemic, contagious, or non-contagious, in different seasons.

Febrile causes, no doubt, are sometimes of telluric origin; and in order to produce their deleterious effects must escape from the earth and be breathed by animals, or be held in solution in the water which they drink. But a more frequent source of fevers is derived from the decomposition of animal and vegetable substances (principally the latter), which is going on upon the surface of the earth, exhaling noxious gases, and impregnating the air with the elements of disease. These injurious agents are so abundant, and so variously combined and applied, as to produce not only many fevers, but extreme modifications of the whole tribe of febrile diseases. This is strikingly exemplified in our epidemics, cholera,

spotted fever, &c., which are so changed in their aspects as to be regarded by many physicians as new diseases.

The atmosphere, independent of any foreign substance which it may contain, is a frequent cause and modifier of disease. Its temperature, moisture and density may be ascertained with a good degree of precision; but all this, together with the noxious agents which it may contain, will not account for the mysteries connected with epidemics. The inhabitants of a section of country, for instance, while enjoying unusual good health, are suddenly attacked with a pestilential and fatal disease. We naturally look around us for the cause or causes of the mortality. At first we find nothing to awaken suspicion. The same genial heavens are over our heads, and the same earth, clad in green, or frost-bound, is beneath our feet. From whence, then, cometh the pestilence? The truth is, that the efficient causes of these scourges of our race are still involved in obscurity. The electrical state of the atmosphere may have something to do in the production and modification of disease. It need not seem surprising that animals which are destined to live in an element connected with an agent so powerful as that of electricity, should be influenced by its different states. But I have not time to dwell on this subject.

The spotted fever, or typhus syncopalis, as it appeared in 1813, was the most malignant fever that I have ever witnessed. It was quite sectional in its character; some towns suffered severely, while others were entirely exempt from its ravages. All ages and classes were its subjects. In some instances the largest portion of a numerous family were swept away so suddenly as to be buried in one common grave. Thirty cases, out of 200 which I saw, between the middle of March and the first of June, terminated fatally. The sudden attacks of this fever were, in most if not in all instances, preceded by a well-marked predisposition. A patient laboring under this predisposition was seldom conscious of it, and yet it was real. On examination, darting pains were detected in some part of the body; the pulse were found to be quick and feeble; the eye slightly inflamed; and the tongue exhibited a thin whitish fur, through which the elongated papillæ were seen with their scarlet points. In this state the predisposed were greatly benefited by one or more small bleedings; circulation was thereby promoted, and the pulse increased in volume and strength. Among several hundred of this class, where we practised bleeding as a preventive, scarcely one had the fever. After the attack, such was the debility of the patient that very few could bear either general or local bloodletting. I had an opportunity of examining but few cases that died of this fever. The surface of the body was either of a dark cloudy color, or covered with spots or petechia to a greater or less extent. Nothing unusual was discovered in the brain, except an increase of vascularity. The lungs were of a dusky color, and somewhat resembled the external appearance of the body. The heart was empty, and appeared flabby. In one instance where the patient died suddenly, the left ventricle and the root of the aorta contained a large mass of coagulable lymph; nothing unusual was observed in the other organs.

The best opinion I was able to form of the origin of this epidemic, was that something deleterious existed in the atmosphere, which operated upon the system in such a manner as to greatly sink the vital powers. The predisposition above described was produced by the same causes which induced the disease. In many instances it wore off with but little injury; the natural efforts of the system being sufficient to restore perfect health.

The main treatment of spotted fever, as it fell under my observation, may be summed up in a few words. The first thing required, was to promote sweating; after which a moderate diaphoresis was to be maintained during the whole course of the fever. This was generally effected by surrounding the patient with steam or hot air, sipping hot teas, and administering sudorifics, such as James's powders, Dover's powders, camphor, &c. An emetic of ipecacuanha, either alone or combined with a few grains of sulphate of zinc, was frequently used, not so much with a view of evacuating the stomach as to arouse the vital powers to action. Occasional laxatives were generally safe and proper. But even these gentle remedies, unless used with caution, were liable to induce a sinking state of the system. It was found important to keep all the organs in such a state as that they might perform their respective functions. At the same time the strength of the patient was supported by a judicious administration of the diffusible stimulants. The more permanent stimulants, denominated tonics, were sometimes found necessary and useful.

In the winter and spring of 1814, the pneumonia typhoides, or bilious lung fever, as it was termed, was extensively epidemic, and in some places was attended with great mortality. Adults were more subject to it than children. The intemperate, the aged, and those who had weak lungs, were the least likely to recover. The fever was usually ushered in with chills; pain in the chest and side; a tedious cough, at first dry, but soon followed with a bloody expectoration; a quick, depressed pulse, with more or less difficulty of breathing. There was generally a redundancy of bile, and in bad cases there was more or less delirium. In 7 or 8 days the fever usually abated; occasionally, however, it continued 2 or 3 weeks before convalescence took place. Cases terminating fatally did so, in most instances, on the 5th, 6th or 7th day.

Notwithstanding appearances seemed to forbid the use of the lancet, most patients were essentially benefited by the loss of 6 or 8 ounces of blood once or twice a-day, for several of the first days of the fever. The pulse and breathing were improved, the pain in the chest and side were mitigated, and expectoration was promoted, by this evacuation. Blistering the thorax was quite beneficial. A solution of tartarized antimony was found a good febrifuge-expectorant. But the greatest remedy to be relied upon, was calomel, with opium and ipecacuanha, used so as to produce a slight salivation. The specific effects of mercury were invariably followed by an abatement of the fever and ultimate recovery of the patient. A violent mercurial action was restrained by a solution of acetate of lead, used not only as a gargle, but internally in small and repeated doses. I look upon lead as the best antidote to the poison of mercury which we possess.

But I hasten to the consideration of typhus fever, in its more specific form, as it has occurred in my practice for the last 30 years. I have noticed the foregoing epidemics, not merely because I have witnessed them, but because they are considered typhoid in their character, and from the manner in which they affect the vitality of the system they shed no inconsiderable light upon genuine typhus.

Allow me, before proceeding further, to call your attention to the *extent of surface* which is exposed to the immediate contact and operation of febrile agents, as much of the importance of fever is to be attributed to this circumstance. Who does not know that burns and scalds, when they are extensive, are much more dangerous than the same kind of injury in a concentrated form? The surface of a middle-sized man is estimated at about 16 square feet, and that of the air-cells of the lungs at more than double that amount. Add to this, the surface of the membrane which lines the nose and its cavities, that of the fauces, œsophagus, stomach and bowels, and we shall have a vast amount of surface, all of which is exposed to the immediate operation of the causes of fever. The sentient extremities of the nerves and small vessels receive the first impression, and for a time the disease is resisted and warded off from the system. Thus a deleterious atmosphere may be respired without any very serious inconvenience for a certain length of time; but if it is longer continued, the vessels cease to obey the laws of health, and disease invades the system. If any portion of the deleterious gas is admitted into the circulation, the extent of surface operated upon by the efficient cause of fever is greatly increased; for not only the surface of the body, the air-cells and contiguous membranes, the stomach and bowels, but the whole extent of the internal coat of all the vessels is placed in contact with febrile agents. Typhus fever, then, is a general disease, affecting every particle of fluid and solid, and whenever it has arrived at this pass cannot be thrown off—time is required to renovate the fluids and wear out febrile impressions.

I do not maintain that febrile agents operate in this way, exclusively; on the contrary, the nervous system in many diseases may be morbidly affected, for a time at least, independent of a diseased state of the fluids; but I do not believe this is often the case in genuine typhus fever. Whenever we bleed, even in an early stage of typhus, the blood is found to be not only thin, but of a dark color. It is true that this state of the vital fluid may be induced without the admission of any foreign agent into the circulation. The lungs may be so impaired in their function as to prevent their maintaining a healthy appearance and condition of the circulating fluid. But it has been clearly made out, to my mind, by those who have thoroughly investigated the subject, that not only contagion, but other noxious substances, are, through the medium of the air-cells of the lungs, admitted into the blood, thereby producing many febrile disorders. That this is the case, in most, if not in all cases of true typhus fever, I have no doubt.

Within a few years an unsuccessful attempt has been made to establish a distinction between typhus, and what has been denominated typhoid fever. I believe them to be essentially the same. The fact is,

that fever affects the organs differently under different circumstances. It may be that typhus operates upon the follicular glands of the bowels more particularly in typhoid fever, in consequence of the deleterious agents being taken into the stomach and bowels in our food and drink; while the same agents, taken into the system through the medium of the lungs, would constitute or induce the more usual form of typhus. The following case would seem to show that febrile causes may invade the system through the medium of the lungs, stomach and bowels at the same time.

B. C., a young man of strong constitution, whose weight was over 200 lbs., during the summer of 1841 was engaged in building a saw-mill, adjacent to which was a foul spring of water from which he frequently drank. In the course of two weeks he was taken with the typhus fever in its most violent form. It affected, in the first place, his stomach, producing nausea and vomiting. This was soon followed by a bilious diarrhœa. His pulse was quick, but not so strong as his appearance would indicate. His breathing was short, and he complained of a hard pain in his head. He soon grew delirious, and became unmanageable. The blood in his case did not exhibit the usual marks of inflammation, being neither cupped nor buffed. In consequence of the violence of his delirium, we were unable to bring him under regular treatment, and he died on the 8th day of his fever.

This case might have been denominated phrenitis, by some physicians, and no doubt it was attended with a high degree of vascularity of the brain, which differed, however, from common inflammation. It had most of the characteristics of genuine typhus, and yet how very different it was from the following cases.

In the fore part of July, 1829, I was called to see two young misses, on Middlesex hills, who had been drooping about for a week or ten days, without being confined to the house. On examination, I concluded that they were laboring under the typhus fever in its mildest form. As there were no cases in town, I had a great desire to ascertain its origin. Everything appeared neat about the house. I was assured that there was nothing wrong in the cellar. There were no swamps or marshes in the vicinity that could infect the air. A fine stream of water passed near by the buildings. On examining the water in the well, we found that it had not only a bad smell, but a nauseous taste; and as this water had been used by the family for some time after it became disagreeable, we concluded that it might be (and probably was) the principal cause of the sickness of the girls. The well was soon cleansed, and the family furnished with pure water. Still the fever was not arrested. Others, in the course of a week or two, were taken down in a more aggravated form. The fever did not subside till it numbered ten subjects in this single family. No one escaped, save the old lady, who was constantly smoking her pipe, and a little boy who was kept running of errands, and slept away from home. They all recovered. Great pains were taken to cleanse and ventilate the apartments, and keep everything in a good condition about the sick. In fair weather the children were carried by the nurse into the garden for an airing. They never failed,

although weak and feverish, to be not only pleased, but refreshed, by this out-door exercise.

Typhus-fever patients are more likely to suffer from the want of pure air than from exposure to the weather. In the winter of 1823, a poor family in this vicinity contracted the fever, and no less than four were confined in one room, and three in another. The air soon became very bad in every part of the house. Three of the patients died in the second and third week, and I saw no reason why all of them would not die in so foul an atmosphere. Having failed in my endeavors to obtain another house, where they might enjoy the benefit of pure air, I directed a man to ride out with them every day that the weather would permit. They were greatly benefited by an exposure to the cold winter breezes. Meantime the windows of the house were taken out, and the rooms were thoroughly ventilated and cleansed for the reception of the sick. Soon after this procedure, the patients began to improve, and all of them subjected to this treatment recovered. But it is to be borne in mind that this was a measure of necessity rather than of choice, and is not to be imitated without good reasons.

Typhus has several times been produced, in our village, by the overflowing of our streams, filling our cellars and wells with impure water, and leaving an accumulation of filth on our low lands. Cold, damp cellars, emitting an offensive odor, are fruitful sources of typhus fever. The disease commenced, after one of these freshets, in the summer of 1831, in the very place where we might expect it to begin. A young lady was taken down as the first subject, who lived near by a large slough, which had been filled up with vegetable matters undergoing fermentation, which very sensibly affected the neighboring atmosphere. This case terminated fatally. But the fever was not long confined to this point, but sprung up in several families on State street, whose wells and cellars had been filled with unwholesome water. It constituted a real endemic, and was attended with a redundancy of bile. Females in middle life were its greatest sufferers; it proved fatal to some of this class, most of whom were nursing mothers. Emetics and cathartics were better tolerated than they generally are in this disease.

In every season that typhus has been prevalent among us, I believe it has originated from local causes, and has to some considerable extent been propagated by contagion. In confirmation of this statement, take the case of a vagrant, who, in the spring of 1823, was arrested in this place for some petty larceny, and incarcerated within the cold, damp walls of our old jail. The room where he was confined was foul and badly ventilated. After remaining here five or six weeks, he looked sickly, and refused to eat. On examination, he was found to be universally debilitated, hardly able to walk by the side of an assistant. A tremor pervaded his whole system; his tongue was red, and his pulse were quick and feeble. I pronounced it to be a case of typhus fever, and directed his removal out of the village. After a run of twenty-one days he became convalescent, and soon regained his flesh and usual strength. But this was only the commencement of the misfortune; for several persons, who assisted in taking care of him, took the fever. Indeed,

it spread all over the neighborhood, and did not subside until the latter part of the following winter, when it was found that not less than forty cases could be traced back to this victim of the law.

In the above case, is it not quite certain that the state of the air in which this man was confined was the principal cause of his fever? If it is replied that others might be similarly exposed and not contract the disease, I reply this may be possible, and yet it may be true that these very persons may become strongly predisposed, and yet escape the fever. That noxious gases under certain circumstances induce typhus, cannot well be doubted; and we are naturally led to inquire how such agents operate upon the system in order to produce their peculiar effects. On this subject, we are permitted to know some things, while others are involved in mystery.

It is highly probable, as has been already intimated, that the whole or a part of the surface of the body, the breathing apparatus, and the alimentary canal, from their exposure to the immediate contact of febrile agents, receive the first impression and transmit it to the brain, capillary vessels and other parts of the system. On examination, we find that divers organs and parts are affected differently, according to their different susceptibilities and the nature of the hurtful agent. In regard to the lungs, while pure air is received into them they perform a healthy office. But when deleterious agents operate upon the delicate nerves and vessels of the air-cells, for a certain length of time, they take on a morbid action, and do not perform their accustomed function. The aeration and purification of the blood is not perfected, and some portion of the febrile poison is taken into the blood, and serves still further to contaminate the whole mass of circulating fluid. The same theory will apply to the stomach and bowels. Those febrile agents which are contained in impure food and water, when taken into the alimentary canal, are treated in the first place as enemies by the nerves and vessels with which they come in contact, and they are either expelled from the system without producing permanent injury, or else the vessels take on a diseased state. Febrile agents may as readily find their way into the circulation through the medium of the stomach and bowels, as the lungs, and in either case they must be gradually expelled from the system by the cutaneous emunctory and other outlets of the body, in order to a return of health.

Enough has already been said to give us a clue to the state of the body in typhus fever. We find that not only the whole man is sick, but disordered in such a manner as is calculated to maintain and perpetuate the fever for some length of time. The secretions, the excretions, and the exhalations, are in a morbid state, and all combine to surround the patient with a febrile atmosphere, which must in a greater or less degree be respired, thereby adding fuel to the fire.

I have said that typhus fever was contagious. It may not be so under all circumstances; at any rate, the contagion may be so diluted as to render it inoperative. Take an example. C. P., a young man, was taken with the fever in the fall of 1841. His mother was an excellent nurse, kept everything neat and in perfect order. The room where he

was confined was large and well adapted for ventilation, having a window in the west end, and another opposite, which allowed a current of air to pass through it. I assured the attendants that they could not take the fever in his case, and although he was quite sick for three weeks no one contracted the fever from him. Other similar instances might be mentioned to show that much may be done to prevent the spread of the fever. But I must hasten to its treatment. Preliminary to this, I would observe that everything which relates to the patient is to be regarded remedial, and is to be under the control of the physician. The air he breathes, his drink and nourishment, the room in which he is confined, the bed on which he lies, light and darkness, noise and silence, exercise and rest, wakefulness and repose, in short whatever may affect either the body or the mind, falls under the care of the physician, and should be made efficacious to the recovery of his patient.

The fanciful doctrine, "similia similibus curanter," has little to do in the treatment of typhus fever. If the doctrine contain any truth whatever, it will be found to be an exception to a general rule. That remarkable man, Napoleon Bonaparte, whose manner of life led him to frequent exposures of his health, constructed a much more rational system, which he long practised successfully upon himself, and which was directly opposite to the one alluded to. When he was indisposed, he endeavored to find out the cause or causes of his complaint, and then to pursue a course opposite to that which produced his sickness. Thus, if his disease was occasioned by cold and fatigue, a warm bed, with suitable rest, was found to be the true remedy. If his complaint resulted from too free living, abstinence was pretty sure to cure him. On this principle I would say, if typhus fever is produced by deleterious gases, it might be thought desirable that the nature of these gases should be understood, so as to lead to a remedy in what is opposite. But in order to cure diseases, it is not necessary to be *strictly* antipathic. We may, to a very great extent, antagonize the effects of the efficient cause or causes of typhus, by atmospheric air and other appropriate remedies. I propose pure atmospheric air, of a suitable temperature, properly applied, as the first and great remedy for the cure of typhus fever. I am aware that it will be said at once that pure air has ever been considered essential in the cure of all diseases. This is generally true, and I am ready to acknowledge that some of our best writers, such as Drs. Good and Watson, have laid great stress upon the doctrine now advocated. In stating this, however, I do not mean to yield the whole ground. I would ask, has any writer proposed pure atmospheric air as the first and great remedy for the cure of typhus fever? Has it not been regarded rather as an adjuvant than a real remedy? By presenting this subject in a somewhat new light, I shall commend those principles which have long guided me in my intercourse with the sick.

It has been said that the tendency of this fever is to health. This, no doubt, is true when everything about our patients is favorable; but in opposite circumstances the tendency is to death. We ought hardly to expect the recovery of a patient in typhus when he is surrounded by a foul atmosphere, whose every respiration impinges upon the delicate coats

of the air-cells a deleterious agent, and that not occasionally, but constantly, for days and weeks, thereby destroying the function of the lungs and rendering the blood and all the secretions impure. On the contrary, if the patient during the whole course of the fever can, to some good extent, breathe a pure atmosphere, and have it applied to his person in such a manner as not only to prove an equalizer of the circulation, but a refrigerant, an anodyne and a tonic, who, I ask, can fail to see in this very thing a principle that may involve the fate of every subject of typhus fever.

How, then, shall we place our patients so that they shall be most likely to recover? In warm weather, if they must be deprived of the privilege of being in the shade in the open air, where they can be fanned and refreshed by the gentle breezes, thereby dissipating morbid exhalations, then they should occupy a large, high room, with windows well calculated for ventilation. It should be neither papered nor carpeted, nor should it contain any useless furniture. Something may, no doubt, be done by disinfecting agents, but they are never to be used to the neglect of free ventilation and the most perfect cleanliness. Pure atmospheric air, of a proper temperature, is to be made use of, not only as a fit remedy for the lungs, but for the body as applied to its surface. Whenever the skin is dry and hot, it is to be cooled down to a proper temperature by fanning the body with a sheet, and by properly adjusting the bed-clothes. This is not only a cooling, but a cleansing, process. Whenever it does not operate satisfactorily in accomplishing the ends in view, we may have recourse to cool water, applied, however, with some caution. There is no case where the face, hands and feet may not be washed and kept clean during the whole course of the fever.

Atmospheric air can be used, not only to allay the fever, but to equalize febrile heat. If the head of the patient is inclined to be too hot, as is generally the case, it can be kept sufficiently cool by the application of cold air; and the best way of doing this, is to place a bladder partly filled with ice water to the head, thereby cooling the air down to 32°, a temperature sufficiently low for all practical purposes. The extremities or any other part, whenever too cool, may be warmed by a resort to bottles filled with hot air, a hot brick wrapped in flannel, or bags of hot sand, thereby raising the temperature of the air, as may be required. We see, then, that with atmospheric air we not only cool the patient down to any desirable degree of temperature, but we equalize the fever, while at the same time we do much in cleansing the body from impurities by the same agent. Meantime we tranquillize the nervous system, promote sleep, guard against delirium, and accomplish much in bringing back the morbid condition of the vessels to a normal state.

An atmospheric bed, I am satisfied, might be used advantageously for fever patients. They would be found cool and comfortable, and would do much to prevent those troublesome ulcers which sometimes occur during a long confinement. When such beds cannot be procured, and *bed-sores* have already taken place, bladders half filled with air may be applied as cushions on or around the ulcers, with great comfort to the patient.

The vessels and nerves of the internal or mucous membrane of the alimentary canal are no less affected in typhus fever, than are those of other surfaces, and are to be treated on the same general principles already laid down, regard being had to the function of organs, as all morbid secretions are a source of irritation to the parts with which they come in contact. The first thing to be done is to remove them, with those remedies which operate gently and leave the stomach and bowels in a good condition. Ipecacuanha is a good emetic when such a remedy is required, and castor oil is an excellent cathartic. After the stomach and bowels have been properly cleansed, they are to be supplied with the most simple materials to which they are accustomed in health. A class of remedies termed diluents, of which water is the principal ingredient, may be used to advantage in febrile disorders. The absorbents of the stomach, even where digestion is destroyed, readily take up these fluids and convey them into the circulation, where they serve to supply, in some measure, the waste or deficiency of the blood and other fluids. Whenever the stomach is capable of digestion, warm, nourishing liquids should be taken moderately, not only with a view of replenishing the vessels, but to awaken the natural instinct of this important organ. These simple remedies have still another use. I refer to their diaphoretic effect. Where diluents, such as water, gruel, diaphoretic teas, &c., fail of producing a moisture upon the skin, some suitable sudorific should be administered, as often as is necessary to produce and maintain the desired object. The skin and lungs are somewhat analogous in their functions; in a certain sense, they perform a vicarious office for each other. Whenever the blood is rendered impure in consequence of disease of the lungs, the cutaneous organ, if kept in a proper state, is capable of transmitting morbific fluids, and thereby relieving the system. If its temperature is uniform and near the healthy standard, and suitably moist, we may be satisfied with its condition. Whenever cordial diaphoretics are required, the diffusible stimulants, such as gum camphor, opium, alcohol, ammonia, &c., may be administered, as the patient requires. The good they do does not always depend upon the diaphoresis they produce, for they not only promote warmth and circulation, and a moist skin, but they sustain the sinking powers by keeping up an action of the whole system. I have seen not a few cases where the apparent struggles of death proved a sort of crisis to the disease, and were followed by a rapid recovery. A skilful application of appropriate stimulants, not only internally but externally, assisted by a current of fresh air, is often instrumental in re-calling the patient to life, especially if the integrity of the organs has been preserved during the fever. Under such circumstances, we are not to despair, although vitality is reduced to its lowest ebb. While life remains, there is hope. On the contrary, if, either from the intensity of the fever, or from bad treatment, some part or organ essential to life has been injured irremediably, then whatever we do will prove unavailing—the patient must die, in spite of all our efforts to save him.

In our daily visits to our patients, we should ascertain the true condition of all the viscera and parts essential to life. If we find any organ

suffering unduly, either from congestion, inflammation, or otherwise, it is the very part that claims attention, and we should give no sleep to our eyes until the complaint is removed and an equilibrium is established favorable to health. The skilful physician foresees the evil in season to remedy it; while one less observant does not detect it until it is too late, and death is the consequence.

It is believed that very few die of typhus fever, merely from general debility. Whenever the vital powers are greatly exhausted, and the diffusible stimulants are likely to fail us, other remedies may be tried. In extreme exhaustion, attended with coma, the arsenical solution of Dr. Fowler is sometimes used with good effect. As a peculiar stimulant, phosphorus, given in small and repeated doses, has acquired some repute in sustaining the patient. Among the cerebro-spinants, some few are noticed as being capable of creating and calling out vital energy—as, for instance, strychnine given in one-twelfth-grain doses every four or six hours, it is stated on good authority, is capable of generating vitality; while quinine, administered at the same time, calls it into action. Such medicines are a desideratum in the treatment of fevers of a low type. That they possess these peculiar virtues, I confess I have no experience.

SKETCHES OF EMINENT LIVING PHYSICIANS.

To the Editor of the Boston Medical and Surgical Journal.

Dear Sir,—I have often thought how delightful a series of gossiping letters from Greece, in the days of the sage of Cos (something like the travels of Anachasis); or from Rome, in the days of Galen; or from London, in the days of Pott and the Hunters—would read at the present day. Politicians, literary men, the *pure literati* and artists, are continually made the subjects of letters, memoirs and biographies. The letters of Willis, the *Memoranda* of Rush, &c. &c., show what can be done in this way, in the departments of literature and politics. Why do we desire to see the faces, and take pleasure in, once at least, conversing with the master minds of our own and of other professions? But you may say, medicine and medical men are not proper subjects for such remarks and comments as are referred to above. I answer, that I can see no reason why the younger portion of the profession, at least, should not gratify (in the language of Dr. Knight, in the National Medical Association) their "laudable curiosity."

To the politician, historian, or merely literary man, a glimpse at the personal, every-day appearance, habits and manners of the distinguished, either living or dead, is food for their pen. Why not equally so, the manners and habits of medical men, who fill so large a space in the world's eye? Can you not see, mentally, the rough but kindly bearing of Abernethy? the good-natured and gentlemanly air of Sir Astley Cooper? the downright, straight-forward manner of Velpeau—or the stately, cold, but polished address of Physic? And can you not compare these with the haughty, self-sufficient step of Dupuytren, or the brusque

carriage of Larrey? To be sure you can, and these things form a part of the men and their times; through these, not unfrequently, we may see into various peculiarities of their mental constitutions—their preferences and antipathies—their devotion to one branch of our profession rather than to another, &c. &c.

In addition to this, a short sketch of the distinguished men of our time, does good in holding up to the young aspirant for medical honors, the models which he is to follow, or the peculiarities which he is to shun.

Entertaining these views of the matter, I have long thought that sketches of a few of the prominent living physicians of Philadelphia might interest the numerous alumni of her schools, while reading the pages of your widely-circulating Journal. I propose beginning this series by giving a short outline of

DR. JOHN BELL.

I must, however, premise that I do it without the knowledge of the parties concerned; and, with your assistance, without their knowledge of my identity. I must also say, that I have no private pique to gratify in writing these sketches; they are written merely with the view expressed above.

Dr. John Bell, who resides in Spruce street below 8th street, is well known to the medical world as a voluminous writer on a variety of subjects. For several years, he edited successfully the "Select Medical Library and Eclectic Journal," and is the author of a standard volume on *Baths*. This work, we are happy to learn, is about going through a new edition, and will soon appear enlarged and improved. No American physician, in my opinion, should be without this volume. The subject of baths, simple and medicated, is by far too much neglected in our country; and it is the duty of the medical profession to enlighten public sentiment on this matter. Dr. B. is also author of a work on the Practice of Medicine, the greater part of "Bell and Stokes's" lectures on the practice of medicine having been written by him.

A very excellent account of the course of the cholera in 1832–33, was drawn up and published by Dr. B. and one of his friends, several years ago, which would throw light on the course of this great epidemic at the present time. A splendid edition of an English translation of "Rayer on the Diseases of the Skin," was edited, and numerous and valuable notes added, by Dr. B., several years ago. This work is now probably the standard authority in the branch on which it treats, in this country. It was among the first of those folio volumes—among which are Moreau's Midwifery, "Pancoast's Quain's Anatomy," "Pancoast's Operative Surgery," &c., whose publication forms a new era in the history of medical book printing in the United States. It is a valuable addition to our medical literature; as would the translation of the great work by the same author (Rayer) on Diseases of the Kidneys.

The "Journal of Health" was, for several years, sustained chiefly by the indefatigable pen of Dr. B. And its influence on the habits of our people, particularly in the training and education of children, was marked and beneficial. We should be glad to see such a Journal, edited by such talent, in existence again.

For several years, and, we believe, still, Dr. Bell edited a widely circulating newspaper, devoted to the causes of temperance and colonization. These labors, however, to him are but amusement. To edit a paper, dash off a lecture on "The Power of Association," "The Painters and Paintings of Italy," or lengthy statistical accounts of the evils of intemperance, is merely recreation—and, like Jonah's gourd, *done in a night.* An extensive practice, which has continued, perhaps grown up, from a nine-year's service, as Attending Physician to the "Philadelphia Dispensary," is attended to with scrupulous fidelity; and the affection of his patients, manifested by their expressions of gratitude, tell in the truest language, that Dr. B., under an exterior, perhaps a little rough, carries a warm *human* heart.

As a lecturer on Physiology in the Medical Institute, founded by Prof. Chapman in 1818, and for many years the nursery of many of our now distinguished teachers, Dr. B. had few equals for general research and accuracy of detail. True, he is not a very imposing lecturer—he attends more to the matter than to the manner—and old Virginia, from whence he, with many others, have come to seek their fortunes, had done well had she given him a little more of the animal, with his clear intellectual capacities. But all who prefer fact to fancy, truth to fiction, and real learning to bombast, will listen to Dr. Bell, on this or any other medical subject, with pleasure and profit.

But I find my paper is covered, and I have not finished Dr. B. I must therefore close, promising, should this suit, and I find time, to continue the narrative. Yours truly, CATO.

Philadelphia, Feb. 24, 1849.

LOBELIA IN HYDROPHOBIA.

To the Editor of the Boston Medical and Surgical Journal.

SIR,—The following statement has been thought to possess sufficient importance and interest to warrant its publication. If you think so, you may, if you please, give it an insertion in the Journal.

Dr. Benaiah Sanborn, who died in 1841 in our neighboring town of Sanbornton, had a very extensive practice for many years in that town and vicinity, enjoying, to an eminent degree, the confidence of the community around him. Although making no pretensions to very much science, he was considered a skilful physician, and a man of high moral and intellectual worth. "Having ascertained," as he supposed, "that lobelia was an antidote to poison of extremely virulent character," he was induced to test its virtues in the treatment of hydrophobia, an opportunity for doing which soon presented. The swine of four families, on the borders of Sanbornton and Meredith, were bitten by a dog supposed to be mad. The Doctor proposed giving the lobelia by way of experiment. To three of the swine it was given as soon as possible, and continued to be given freely for some time. These all lived, while the one to which it was not given proved mad and died of hydrophobia.

He was afterwards called to see a son of Esquire Mooney, of Canterbury, 9 years of age, who had been bitten. It was the 11th day of his

disease. "He had become very wild, and the spasms were so severe that it was necessary to confine him and pry open his mouth in order to administer anything." Whilst the lobelia was preparing, he gave, in hopes of allaying the spasms, a powder composed of opium, 1 gr.; sal. nitre, 1 gr.; camphor, 1 gr.; digitalis, 2 grs. A strong decoction of the lobelia being prepared, was then given and repeated until free vomiting was produced. It was taken with difficulty at first, being ejected from his mouth and nose, but the effort was persevered in and succeeded. In three hours, the Doctor remarked, "the patient was relieved, and sat at the table and took tea with the family comfortably."

Another case, in which the same treatment was entirely successful, was that of a Mr. Newell, of Reading, Mass. His reputation for the successful treatment of this dreadful disease, it seems, became somewhat extensive, and is, to this day, held in high estimation by the people amongst whom he dwelt; so much so, I am told, that many of them are in the habit of yearly laying by them in store their bunch of lobelia.

The facts, as above related, I have had in my possession for a long time, having been for many years a neighbor to Dr. S. Having had no opportunity to test the value of this treatment by actual experiment, and having never seen, as I recollect, any allusion, in any of our Medical Journals, to the use of lobelia in the treatment of hydrophobia, I thought the communication might not be uninteresting or unprofitable to the profession. Should any be induced to make trial of the above, I hope they will give the result of their experiment through the pages of the Journal.

Boscawen, N. H., Feb. 22, 1849. E. K. Webster.

SPEEDY RE-UNION OF FRACTURED BONES

To the Editor of the Boston Medical and Surgical Journal.

Dear Sir,—As the following case is somewhat out of the ordinary course of surgical experience, and may prove of some practical value to young surgeons, I have thought fit to forward it for publication in your valuable Journal, should you think proper. Respectfully yours,

Foxcroft, Me., Feb. 16, 1849. S. Laughton.

July 24, 1848.—Was called to visit A. S. Bartlett, Esq., of Dover, æt. 33 years. Temperament sanguino-bilious; of medium stature; never used ardent spirits. While oiling some of the machinery in his iron factory, had his left hand caught in a band, which carried it around an iron shaft of some two inches in diameter, fracturing and lacerating the hand and forearm nearly as high as its middle, in a most shocking manner; also producing transverse fracture of the humerus just below the insertion of the deltoid muscle. The elbow and shoulder joints were uninjured. The point at issue between the by-standers present, when I arrived, was, shall the limb be amputated at the seat of fracture of humerus, or below the elbow? There being no medical gentleman present with whom to consult, I decided upon the latter, though much against the judgment of most who were present. I immediately reduced and dressed the fractured humerus, applying the starched pasteboard

splints; after which I amputated the forearm near its middle, adopting, as I usually do, the method of Mr. Liston. The wound was dressed in the usual manner with water dressings, the patient placed in bed, and the limb, in the state of semi-flexion, was laid in a curved concave splint.

Considerable swelling of the stump below the elbow followed, caused, probably, by the closeness of the dressings above, but was readily controlled by saturine and evaporating lotions. The wound united by first intention, and was perfectly cicatrized by the 14th day. Nothing worthy of note occurred up to the 13th day, when the patient complained of an unusual degree of pain, which for the first time was referred to the seat of fracture. On removing the dressings, I found the swelling of the arm had subsided, leaving the envelope of splints quite loose about it, and upon examination ascertained that re-union of the fracture had not yet commenced. The cause of pain was also discovered to be the action of the deltoid and pectoral muscles on the upper fragment of bone, tending to raise it from its proper place. The dressings were now more closely re-applied, and the case progressed without an unfavorable symptom to the time of perfect re-union, which was accomplished on the 15th day of August, 22 days from the date of the injury.

Mr. B. is now, and has been for several months past, wearing an artificial arm and hand with great ease and convenience, and manages his horse with as much apparent ease as ever.

The point which may be considered as worthy of special notice in the above case, is, the early re-union of the fracture above the amputation, the weather at the same time being exceedingly warm. If similar cases have occurred in the practice of other surgeons, I should be happy to hear from them, and of the results, either privately or through the Journals.

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, MARCH 7, 1849.

Spurious Quinine.—A distinguished chemist addressed us a note, last week, asking if it would not be advisable to let our medical readers know that they must be careful in purchasing sulphate of quinine, as there is a large quantity in the market shamefully adulterated, to the extent of twenty-five per cent. by analysis. So it seems that the new drug inspection laws cannot prevent all the fraudulent schemes in the matter of medicine. This one item of information shows very clearly that our apprehensions, some months since, were well founded, that the cheating in drugs would hereafter be accomplished at home instead of abroad. The advantages of changing the system, by Congress, are, that our own unprincipled dealers get a double profit. Formerly they sold the spurious articles already prepared; now they perform the adulterating manipulations themselves, and thus conduct a thriving business. An active demand for sulphate of quinine has grown out of the California epidemic—the fact being notorious that intermittent fevers are one of the accompaniments of gold hunting. This circumstance, therefore, has very likely induced

individuals to exert themselves with activity, to supply the demand, so that all who wish may carry a bottle to the new El Dorado. One of the most lamentable features in this abominable deception, is, that there are no legal means of arresting the sale. Even arsenic and prussic acid may be sold at the corners of the streets, by apple-boys, for aught that we know to the contrary, without trespassing upon any law or ordinance existing in this ancient Commonwealth. Notwithstanding the national law, therefore, in regard to drugs and medicines, the ingenuity which has been developed is working immense mischief.

Boston Society for Medical Improvement.—A delightful anniversary meeting of the association was held at the elegant residence of Dr. Hayward, Pemberton square, on Tuesday evening of last week. The members will look back with pleasure to the pleasant interchange of civilities, and the hospitality which characterized the occasion, and, like ourselves, regret that some scheme cannot be devised for bringing the profession of the city more frequently together. Medical gentlemen, in different parts of the town, are almost strangers to each other. New comers into the ranks professional, proportioned to the constant increase of population, should be taken by the hand and introduced to the brotherhood; and thus a common feeling of interest for the stability of our institutions and good fellowship would be cherished, and we should be known as model physicians, at peace among ourselves and all the world besides.

Popular Anatomical Lectures.—Boston is bountifully supplied with lecturers on manakin anatomy, just at this period. Crowds are collected together for the purpose of learning the elements of their own organization, and to hear the wonderful story of the laws that govern their existence. Some rivalry is manifested in this extensive business of teaching the multitude, by comers from different parts of the compass—all eager to pocket the ninepence, the customary fee for explaining the whole mystery of manhood. A large part of the heterogeneous audiences in attendance on these marvellous exhibitions of model men and *papier maché* females, are influenced, it is presumed, quite as much by a vulgar curiosity to see what is not to be seen, as by a laudable desire for knowledge. As all things finally have an end, it is fair to conclude that this new branch of business will by-and-by be brought to a close, when its patrons will perhaps find that they have paid for more sound than substance.

Pennsylvania Hospital for the Insane.—Few public reports will be read with more satisfaction than Dr. Kirkbride's, of the state of the institution over which he presides with distinguished ability. The capacity of the establishment is adequate to the accommodation of 200 patients, although a larger number have been admitted. A steady demand for admission renders additional conveniences necessary, which will undoubtedly be seasonably provided. During the past year, 120 were discharged cured; 23 much improved; 24 improved; 19 remained stationary; and 17 died. Dr. Kirkbride complains of the premature removal of patients—an evil which is deplored by superintendents of other retreats for lunatics, and hence it becomes a subject of surprise with intelligent people, why the managers allow it to be continued. The medical adviser is competent to

determine whether the prospect of a recovery is good or not, and friends should be influenced by his decision, without a sole reference to their own yearnings of affection and consequently distorted judgment. The tabular statements are quite elaborate, and too numerous to be particularly alluded to in the Journal. They are the minute records to which those particularly devoted to the study of lunacy will resort with peculiar interest. No organization could be more conducive to the daily comfort of the insane, than exists in this hospital. The workshop for those having constructive faculties, detached cottages for a certain order of patients, a museum and reading room, an annual course of lectures on different departments of science, the character of teachers and companions, the mental treatment, in combination with a multitude of appliances for bettering the condition of the unfortunate inmates, are highly creditable to the Commonwealth of Pennsylvania, to the city in which the charity is located, to the active benevolence of the board of managers, and to the indefatigable physician whose life is given to the service of his reason-bereft fellow beings. The table of expenditures and receipts exhibits a healthful state of the finances, and an economical administration of the affairs of the establishment.

University of Maryland.—Although so near the great medical centre, Philadelphia, the medical department of the University of Maryland, at Baltimore, is exceedingly prosperous, judging from the number of students on the catalogue, 190, which is a large class. In March last, at the close of the term, 63 gentlemen were admitted to the degree of Doctor in Medicine. No efforts are wanting, on the part of the faculty, to make the school a most excellent one in every respect. It is the fourth in point of age in the Union, and inferior to no one in respect to energy, enterprise and disposition to promote the welfare of students. Dr. Smith, the professor of surgery, is a man of extensive renown—both as a successful teacher and adroit operator.

Cryptogamous Origin of Malarious and Epidemic Fevers.—This is an ingenious and learned series of six lectures on the cryptogamous origin of certain fevers, by J. K. Mitchell, M.D., professor of practical medicine in the Jefferson Medical College. It is published at the solicitation of the students, by Messrs. Lea & Blanchard. If the Philadelphia faculty continue to be as industrious as they have been for the last few years, they will become as celebrated and prolific as authors, as the city they inhabit is for schools of medicine. We should like to see a review of this by Dr. Caldwell, of Kentucky; Dr. Bartlett, of Lexington; Dr. Payne, of New York, or Dr. Ware, of Boston. It is really worthy of the profound attention of a very profound teacher of theory and practice.

"*Diseases of Advanced Life.*"—A more satisfactory and truly rational train of excellent suggestions have not been ushered into being for a long time, than are contained in this work. The idea of making old age comfortable is praiseworthy, accompanied, as it is, by those philanthropic feelings which ennoble humanity. Geo. E. Day, M.D., of London, is the writer. He seems to have investigated, with special care, the phases of

approaching age, and studied the physical phenomena peculiar to the down hill of life. Each disease that fastens upon man, as the sands are running out, is judiciously considered, and appropriate remedies for alleviating, if not curing, are prescribed. It cannot be understood without being perused. We are gratified that Messrs. Lea & Blanchard considered it for their interest to re-publish this medical novelty—trusting that others will also profit by the enterprise. Ticknor & Co. have it.

Obstetrics—the Art and the Science.—Messrs. Lea & Blanchard have published a noble octavo of 685 pages, illustrated with 120 cuts, with the above title, by Charles D. Meigs, M.D., of Philadelphia, whose reputation as a writer on obstetrics is not eclipsed by any other in America. His style is bold, independent, and so perfectly conversational that the reader almost fancies that the author is standing at his elbow. The dedication to the celebrated Dr. Drake, the Louisville professor, is one of the e cellent things in the book, which eminently exhibits the character of Dr. Meigs's mind. Reserving further remarks for another occasion, it is only necessary to acknowledge the safe arrival of the work at Ticknor & Co.'s, where copies are on sale.

Braithwaite's Retrospect.—Part 18. of the uniform American edition, was promptly distributed last week, by Mr. Wiley, No. 20 State street, the Boston agent. It maintains the reputation which has been accorded to it from the commencement. For 75 cents the purchaser is furnished with a digest of all the medical journals of Great Britain. He has a volume, at this price, every six months, that contains a retrospective view of every discovery and practical improvement in the medical sciences.

Fistula Infirmary.—An extraordinary amount of business appears to have been transacted in this institution—one of the benevolent affairs of London. Here follows some account of a late anniversary.

The Lord Mayor, in proposing "prosperity to the Hospital," said that this was the 12th year of its foundation, and it has been since that time gradually increasing in efficiency. During the past year, however, he was sorry to observe that many of the most zealous contributors had been carried off by the prevailing epidemic, and the funds of the insitution had suffered a proportionate decrease. The proceeds of the present year, however, were about equal, or at all events not inferior to former years; and this, considering the severe pressure of the times, was a matter for very sincere congratulation. The claims which this charity had upon the public were very great—claims which it was only necessary the public should recognize in order to enable the hospital to enlarge its sphere of usefulness. But, since the foundation of the infirmary, no less than 5000 patients had been treated; and of that number not less than 1500 had undergone operations. During the last year there were 500 cases admitted, and half had been discharged cured. These were striking facts, which fully demonstrated the necessity of maintaining to the utmost extent the original objects and designs of the charity Means of relief are thus opened to the poor for escaping from a malady, not only serious in itself, but from one which induces other disorders, engendering the most serious consequences to the individual.

Dr. Lallemand in Egypt.—Dr. Lallemand has met with a very flattering reception in Egypt. That gentleman had been summoned thither to attend Ibrahim Pacha in his last illness, but the viceroy was dead when Dr. Lellemand landed in the country. The latter was conveyed from Alexandria to Cairo by a government steamer, by order of Ibrahim's brother, and offered apartments in the palace; which honor the doctor, however, declined, in order to be more unshackled in his movements. The whole of the medical body, headed by Clot-Bey, went to congratulate him; and he received the same compliment from the polytechnic and law schools. The new viceroy gave Dr. L. an audience; and a steamer was placed at his command to proceed to Upper Egypt.—*Lon. Lancet.*

Medical Miscellany.—Died at Hollis, N. H., the Hon. Timothy Farrar, aged 101 years, 7 months and 10 days.—Dr. Charles T. Jackson, of Boston; Bonpland, the naturalist; Dr. Patissier, of the Academy of Medicine; and Dr. Roulin, of Paris, have been made Knights of the Legion of Honor.—Dr. Thomas B. Nalle goes out surgeon of the U. S. Frigate Savannah, bound from Boston to the Pacific, and Drs. G. R. B. Horner and R. F. Mason assistant surgeons.—Mrs. Wright is lecturing in Boston to the ladies, on anatomy and physiology, with splendid models and illustrations. Miss Hunt is also lecturing to the poor, gratuitously, on the same subject.—A new discovery has been made in regard to the treatment of tape-worm, of much importance, an account of which is anticipated from the pen of a Boston physician shortly, for this Journal.—An important trial is soon coming on before the Supreme Court of Massachusetts—a man having sued the Boston & Worcester Railroad Corporation, on account of an injury to his wife while in the cars, which caused her death. The medical testimony will be of practical value regarding the phases of lumbar abscess.—Rabid dogs are still the terror of the people in various parts of New England.—Several excellent medical works are in press at Philadelphia, which may be expected in this market as soon as published.—Rumor says that Dr. Daniel Drake has resigned his chair in the Louisville, Ky., Medical School.—George Linnett died on the 6th of January, at Brighton, N. S., at the advanced age of 120—the sole survivor, for years, of the army of the celebrated Gen. Wolf, at the siege of Quebec.—A man who has been confined for 40 years in the poor-house at Newton, a raving maniac, has been suddenly and completely restored to reason. He appears like one awakened from a long sleep, remembering distinctly what took place before he became insane, but recollecting nothing of the longer period during which his reason has been dethroned.

To CORRESPONDENTS.—The following papers have been received:—Use of Anæsthetic Agents at Bellevue Hospital, New York; Case of Uterine Hæmorrhage; Sketch of Dr. Edwards, of Ohio; the Medical Society of Connecticut.

DIED,—In Oldtown, Me., Dr. John Temple.

Report of Deaths in Boston—for the week ending March 3d, 93.—Males, 50—females 43.—Of consumption, 9—typhus fever, 2—scarlet fever, 10—brain fever, 1—lung fever, 8—pleurisy fever, 2—slow fever, 1—measles, 19—teething, 1—infantile, 6—inflammation of the bowels, 3—inflammation of the lungs, 3—disease of liver, 3—disease of the heart, 1—disease of bladder, 1—disease of the lungs, 1—disease of the brain, 2—dropsy, 3—dropsy on the brain, 2—pleurisy, 1—erysipelas, 1—convulsions, 1—old age, 2—croup, 2—rupture of blood-vessel, 1—marasmus, 2—starvation, 1—child-bed, 1—chicken pox, 1—cancer, 1—unknown, 1.

Under 5 years, 48—between 5 and 20 years, 14—between 20 and 40 years, 11—between 40 and 60 years, 9—over 60 years, 8.

Case of Lithotomy: 117 *Calculi, weighing* 4½ *ounces, successfully removed.* By PAUL F. EVE, M.D., Prof. of Surgery in the Medical College of Georgia.—Mr. O'Bannon, in 1824, then aged 18, received a fall, by which his back was injured, and a difficulty in urinating produced, which has continued to increase. For the past two years, in order to pass urine at all, he had to assume the horizontal position, and push up the bladder with his fingers in the rectum. When sitting on the edge of a chair, a sensation was felt as of crushing a ball of snow in the perineum. On the 6th of last January the following operation was performed, chloroform being first administered. After the patient was placed in the usual position for lithotomy, an incision, about three inches in length, was made over the tumor situated in the perineum, as for the lateral operation, except that it was upon the right instead of the left side. About 56 calculi were removed through this opening, and it was hoped the operation was completed; but upon introducing a female catheter through the wound into the bladder, a second collection of stones was readily detected in this receptacle. A grooved sound was now passed through the urethra, and the double lithotome, conducted by it into the bladder; the former was withdrawn and the bi-lateral section completed, by drawing the latter instrument out somewhat in the line of the external incision made in the skin. With the lithotomy forceps repeatedly introduced, by conducting it upon the finger, 61 stones were extracted from the bladder. Through the opening in the perineum a quantity of pus was discharged. During the operation, the rectum protruded in a large mass so as to interfere with lowering the handle of the forceps, to seize the calculi in the bladder. The patient also had violent and involuntary contractions of the abdominal muscles, and during the latter stage of the operation the chloroform was discontinued. It lasted one hour. He was so reduced by his long suffering, a period of 24 years and 4 months, that after the operation I took him like a child in my arms and carried him up a flight of stairs to his room.

On analyzing the calculi, the presence of phosphate of lime, almost pure, was revealed. The chemical elements were 3 atoms of phosphoric acid, 8 of lime, and 1 of basic water. The whole number of calculi extracted was 117, of which the largest weighed ʒij. and 38 grs.; the two next in size, each 78 grs., and the smallest 1 gr.—furnishing an aggregate weight of ʒivss.

As usual with me, no dressing was applied to the wound, but the patient was requested to keep his knees together and to remain perfectly quiet. He took 40 drops of laudanum the night after the operation, and his diet was restricted to cold lemonade flaxseed tea. He passed a pretty good night. Next morning, some urine had even been already voided by the natural passage, notwithstanding the opening in the perineum. He has bathed himself in warm water; has now no fever, is quite cheerful, smokes his pipe, and has taken some soup, table tea and an orange. Nothing but castile soap and warm water, several times daily, was afterwards applied to the wound.

On the 24th of January, i. e., the 18th day after he was disembarrassed of his numerous calculi, Mr. O'Bannon returned home, a distance of 22 miles. The wound had nearly healed. He is to use, as a tonic, small doses of sulphs. quinine and iron.

A month after the operation, a special messenger reports him entirely well.—*Abridged from the Southern Med. & Surg. Journal.*